Claims

1. Method of transmitting data (S) by radio,
   - in which, a frequency band subdivided into a plurality of subcarriers and a plurality of antennas (TX1, TX2, TX3) is used for transmission,
   - in which the data (S) is divided up into a number corresponding to the number of the plurality of subcarriers into elements (S_1, S_2, S_3) to be transmitted by each antenna (TX1, TX2, TX3),
   - in which for each antenna (TX1, TX2, TX3) each element (S_1, S_2, S_3) is assigned for transmission to a subcarrier in each case,
   - in which case at least two antennas (TX1, TX2, TX3) transmit different elements on at least one subcarrier (S_1, S_2, S_3),

characterized in that

   - before an OFDM modulation (OFDM) for each antenna (TX1, TX2, TX3) each element (S_1, S_2, S_3) is multiplied by an antenna-specific and an element-specific factor.

2. Method in accordance with Claim 1, characterized in that,
the factor is a complex or real number amounting to 1.

3. Method of transmitting data (S) by radio,
   - in which a frequency band subdivided into a plurality of subcarriers and a plurality of antennas (TX1, TX2, TX3) is used for transmission,
   - in which the data (S) is divided up into a number corresponding to the number of the plurality of subcarriers into elements (S_1, S_2, S_3) to be transmitted by each antenna (TX1, TX2, TX3),
   - in which for each antenna (TX1, TX2, TX3) each element

(S_1, S_2, S_3) is assigned to a subcarrier for transmission in each case,

- in which at least two antennas (TX1, TX2, TX3) transmit different elements on at least one subcarrier (S_1, S_2, S_3), characterized in that
- after an OFDM modulation (OFDM) for at least one antenna (TX1, TX2, TX3) a re-arrangement of the timing sequence of the time-dependent signals produced as a result of the OFDM modulation (OFDM) is undertaken.

4. Method in accordance with claim 3, characterized in that,
for at least two antennas (TX1, TX2, TX3) the re-arrangement of the timing sequence is undertaken in accordance with a common pattern (b).

5. Method in accordance with claim 4, characterized in that,
the common pattern (b) concerned is a cyclic permutation.

6. Method in accordance with one of the claims 1 to 5, characterized in that,
for at least two antennas (TX1, TX2, TX3) the assignment of the elements (S_1, S_2, S_3) to subcarriers is undertaken in accordance with the common pattern (a).

7. Method in accordance with claim 6, characterized in that,
the common pattern (a) concerned is a cyclic permutation.

8. Transmit device (S) for transmitting data (S) by radio via a number of antennas (TX1, TX2, TX3),

- in which a frequency band subdivided into a plurality of subcarriers is used for transmission
- with means (M1) for dividing the data (S) into a number of

elements (S_1, S_2, S_3) corresponding to the number of the plurality of subcarriers to be transmitted by each antenna (TX1, TX2, TX3) in each case,

- with means (M2) for assigning the elements (S_1, S_2, S_3) to one subcarrier in each case for transmission for each antenna (TX1, TX2, TX3) such that at least two antennas (TX1, TX2, TX3) transmit different elements (S_1, S_2, S_3),

characterized in that

- it features means (M3) for multiplying each element (S_1, S_2, S_3) for each antenna (TX1, TX2, TX3) by an antenna-specific and element-specific factor before the OFDM modulation (OFDM), or
- it features means (M4) for re-arranging the timing sequence of the time-dependent signals created as a result of the OFDM modulation (OFDM) for at least one antenna (TX1, TX2, TX3) after the OFDM modulation (OFDM).